

## AMENDMENT

### In the Claims

1-113. (canceled)

114 (previously presented). A composition comprising: a recombinant polypeptide comprising an organelle localization signal operably linked to a protein transduction domain, wherein the recombinant polypeptide is operably linked to a polynucleotide.

115 (previously presented). The composition of claim 114, wherein the composition is a viral vector.

116 (previously presented). A composition according to claim 114, wherein the composition is a recombinant bacteriophage.

117 (previously presented). A composition according to claim 114, wherein the organelle localization signal operably linked to the protein transduction domain is expressed on an exterior surface of a vector.

118 (currently amended). A composition according to claim 114, wherein the ~~compositions~~ composition is a virus particle.

119 (previously presented). A composition according to claim 114, wherein the polynucleotide encodes a mitochondrial protein, a chloroplast protein, heterologous polypeptide, siRNA or antisense nucleic acid specific for mitochondrial or chloroplast mRNA.

120 (previously presented). A method for treating a mitochondrial disease comprising contacting at least one cell of a host having or suspected of having a mitochondrial disease with a vector comprising at least one protein transduction domain on a surface of the vector, at least one mitochondrial targeting signal on a surface of the vector, and a polynucleotide encoding a functional mitochondrial polypeptide, wherein the functional mitochondrial polypeptide is

expressed in at least one mitochondrion of the cell.

121 (previously presented). A cell comprising a composition according to claim 114.

122 (previously presented). A method for producing a mtDNA depleted cell comprising:  
contacting the cell with at least one siRNA directed to POL $\gamma$ .

123 (currently amended). The method of claim 122, wherein the siRNA is selected from the siRNAs listed in TABLE 3 or a sequence having 80-100% homology to the siRNAs listed in TABLE 3 or SEQ ID NOs. 195574

124 (previously presented). The method of claim 123, wherein a target sequence of POL $\gamma$  RNA inhibition is selected from the POL $\gamma$  target sequences in TABLE 3.

125 (previously presented). A kit for transfecting organelles, the kit comprising: a polynucleotide encoding an organelle localization signal operably linked to a bacteriophage lambda surface polypeptide; and bacteriophage lambda packaging components for preparing a recombinant lambda vector.

126 (previously presented). A method for transfecting an organelle, the method comprising the step of introducing a recombinant viral vector comprising a nucleic acid to be expressed in the organelle into the cytosol of a cell, wherein the recombinant viral vector displays an organelle localization signal on a surface of the vector for directing the vector to an organelle to be transfected.

127 (previously presented). A method for producing a cell lacking mitochondrial DNA comprising: contacting the cell with at least one siRNA directed to a gene involved in sustaining or maintaining mtDNA or mtDNA stability.